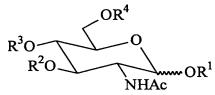
CLAIMS

- 1. An N-acetylglucosamine derivative represented by the following formula (1):
- 5 formula (1)



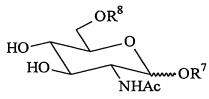
wherein R^1 is a hydrogen atom or an alkyl group having 2 to 18 carbon atoms; R^2 , R^3 , and R^4 are hydrogen atoms or acyl groups having 2 to 18 carbon atoms and may be all the same or different from others; the steric structure at position 1 may be α or β ; provided that R^1 , R^2 , R^3 , and R^4 must not be all hydrogen atoms.

- 2. A skin external preparation containing the N-15 acetylglucosamine derivative according to claim 1.
 - 3. An N-acetylglucosamine derivative represented by the following formula (2) or (3): formula (2)

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wherein R^5 is an alkyl group having 2 to 18 carbon atoms; R^6 is a hydrogen atom or an acetyl group; and the steric structure at position 1 may be α or β : or formula (3)



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wherein R^7 is a hydrogen atom or an alkyl group having 2 to 18 carbon atoms; R^8 is an acyl group having 2 to 18 carbon

atoms; and the steric structure at position 1 may be α or β .

4. An N-acetylglucosamine derivative represented by the following formula (4):

5 formula (4)

wherein the steric structure at position 1 may be α or β .

formula (5)

wherein the steric structure at position 1 may be α or β .

6. An N-acetylglucosamine derivative represented by the following formula (6):

formula (6)

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wherein the steric structure at position 1 may be α or β .

7. An N-acetylglucosamine derivative represented by the following formula (7): formula (7)

wherein the steric structure at position 1 may be α or β .

8. An N-acetylglucosamine derivative represented by the following formula (8):

formula (8)

wherein the steric structure at position 1 may be α or β .

9. An N-acetylglucosamine derivative represented by the following formula (9):

formula (9)

HO
$$OH$$
NHAc $OC_{12}H_{25}$

wherein the steric structure at position 1 may be α or $\beta.$

10. An N-acetylglucosamine derivative represented by the following formula (10):

formula (10)

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- 20 wherein the steric structure at position 1 may be α or β .
 - 11. An N-acetylglucosamine derivative represented by the following formula (11):

formula (11)

wherein the steric structure at position 1 may be α or β .

5 12. An N-acetylglucosamine derivative represented by the following formula (12):

formula (12)

wherein the steric structure at position 1 may be α or β .

13. An N-acetylglucosamine derivative represented by the following formula (13):

formula (13)

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15 wherein the steric structure at position 1 may be α or β .

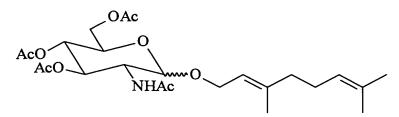
14. An N-acetylglucosamine derivative represented by the following formula (14):

formula (14)

wherein the steric structure at position 1 may be α or β .

15. An N-acetylglucosamine derivative represented by

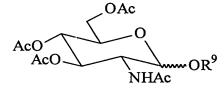
the following formula (15): formula (15)



wherein the steric structure at position 1 may be α or β .

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- 16. A skin external preparation containing the N-acetylglucosamine derivative according to claim 3.
- 17. A hyaluronic acid production-promoting agent containing the N-acetylglucosamine derivative according to claim 3 as active ingredient.
- 18. A hyaluronic acid production-promoting agent containing an N-acetylglucosamine derivative represented by the following formula (16) as active ingredient: formula (16)



wherein R 9 is an acyl group having 2 to 16 carbon atoms and the steric structure at position 1 may be α or β .

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- 19. A skin external preparation containing the N-acetylglucosamine derivative according to claim 18.
- 20. A skin external preparation containing as active ingredient the N-acetylglucosamine derivative represented by the following formula (17):

 formula (17)

wherein the steric structure at position 1 may be α or $\beta.$